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Dear editor,

I would like you to please consider the manuscript for publication in your journal. The title is “**Design, Fabrication and Measurement of a Compact CPW-Fed Planar Monopole Antenna with Dual-Band Characteristics for WLAN/WiMAX Applications**” and it is a result of 3 years of exploration and study. The manuscript is in form of an article (original scientific paper) and has the following authors:

Ahmed Zakaria Manouare, Divitha Seetharamdoo, Saida Ibnyaich, Abdelaziz EL Idrissi, Abdelilah Ghammaz

Manuscript's significance:

To incorporate two different communication standards in a single device, a compact dual-band planar monopole antenna is proposed in this paper. The proposed antenna is formed by a CPW feed line and a rectangular ring monopole with a vertical strip. The designed antenna has a small overall size of 19 mm (width) \times 36 mm (length) \times 1.6 mm (thickness). A prototype of the proposed antenna which was fabricated and measured to validate the design shows a good agreement between the simulation and the experiment. The measured results indicate that the antenna has the impedance bandwidths of 650 MHz (2.30-2.95 GHz) and 2460 MHz (3.40-5.86 GHz) at the first and second bands, respectively with a reflection coefficient less than -10 dB covering all the WLAN bands (2.4/5.2/5.8 GHz) and WiMAX bands (2.6/3.5/5.5 GHz). In addition, the nearly omni-directional and bi-directional radiation patterns are also achieved in both H- and E-planes, respectively. It is also noticeable that a good antenna gain over both operating bands has been obtained. Therefore, this simple compact planar monopole antenna with dual-band characteristics is well suitable for WLAN and WiMAX communication applications. Details of the proposed antenna design and both simulated and experimental results are analyzed and discussed.

Keywords:

Coplanar waveguide (CPW); dual-band antenna; planar monopole antenna; compact antenna; WLAN/WiMAX applications.

Statements:

This manuscript has not been published previously by any of the authors and is not under the consideration for publication in another journal. All authors have seen and approved the submission of the manuscript.

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Thank you for your consideration of our manuscript.

Yours sincerely,